TESTIMONY OF DR. JAY THOMAS VICE PRESIDENT FOR RESEARCH AND DEAN, SCHOOL OF GRADUATE STUDIES WRIGHT STATE UNIVERSITY

BEFORE THE SUBCOMMITTEE ON FEDERALISM AND THE CENSUS COMMITTEE ON GOVERNMENT REFORM UNITED STATES HOUSE OF REPRESENTATIVES

"THE AIR FORCE INSTITUTE OF TECHNOLOGY: AN INTERGOVERNMENTAL MODEL FOR TODAY'S MILITARY EDUCATION"

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INTRODUCTION

Good morning, Mr. Chairman and members of the Subcommittee. My name is Jay Thomas. I am the Vice President for Research and Dean of the Graduate School at Wright State University. I am pleased to have this opportunity to testify about Wright State University, its interactions with AFIT, and its participation in the Dayton Area Graduate Studies Institute.

WRIGHT STATE UNIVERSITY

Next year, 2007, Wright State University will celebrate forty years of service to the Dayton region, the State of Ohio, and the nation. Wright State has grown up with Wright-Patterson AFB as a supportive neighbor, influencing program development, partnering in research, and hiring our graduates. Particularly close ties have developed with AFIT and the Air Force Research Laboratory. In

engineering and computer science, these ties have been facilitated and strengthened by the development, beginning in 1994, of the Dayton Area Graduate Studies Institute.

Wright State's College of Engineering and Computer Science offers undergraduate and graduate programs keyed to Air Force needs. Traditional programs such as electrical and mechanical engineering feature research emphases such as target recognition and design optimization which have received continuous Air Force funding and benefited from close working relationships between Wright State faculty members and Air Force staff. Wright State has offered one of the few programs in the country in Human Factors engineering, a program targeting human-machine systems including aircraft pilot performance. Wright State also has programs in its School of Medicine and College of Science and Mathematics such as environmental toxicology and cognitive science that interact strongly with the AFRL. Wright State owns and operates a virtual environment CAVE which is housed in the AFRL Human Effectiveness directorate.

ROLL OF DAGSI

You have heard about DAGSI from President Curran and will learn more from Dr. Downie in the following testimony. Among the three of us, I am the only one that has been in my position since pre-DAGSI times, so I can comment on some of the history.

In 1993, the deans of engineering of Wright State, the University of Dayton, and AFIT were called together by Dayton region industry leaders and urged to cooperate rather than compete, and to develop world class programs. We have worked to do so. AFIT has always offered unique programs keyed to Air Force needs. Since the 1993 time period, the University of Dayton has become a national leader in materials research and Wright State has developed leading programs in computer science and related computational design. These complement each other as well as AFIT programs providing the region a breadth of programs of recognized excellence.

At the same time that regional leaders were encouraging cooperation, the Ohio Board of Regents, the state agency that coordinates higher education, embarked upon several initiatives to promote program excellence and collaboration. The OBR realized that carrots were better than sticks to achieve such goals and had demonstrated a willingness to fund such initiatives. With this background, the three engineering deans began to meet regularly, in fact every week for more than a year, to develop DAGSI. They learned that collaboration is hard work, must be built on a foundation of trust, and must be win-win for all involved. Through this process, Wright State, and the University of Dayton, became much better acquainted with AFIT.

WORKING WITH AFIT

Wright State very much values its interactions with AFIT. These take many forms. Through DAGSI, engineering students at either school can take courses at the other, courses that would not be available at their home institution. For doctoral programs, there is a practice of including an external DAGSI faculty member on each doctoral student's dissertation committee. AFIT faculty members bring unique knowledge and perspectives to these committees which greatly benefits the student. Such sharing of faculty expertise also promotes quality of the research and the overall doctoral experience. At the same time, the interaction of faculty members around a specific research topic enables collaboration on future research projects.

These programmatic features are of mutual benefit to Wright State and AFIT. For AFIT, state and regional resources leverage AFIT's federal funding and bring an extra measure of excellence to AFIT programs.

Several years after DAGSI was established, AFIT was threatened with closure. This was a clear threat to the economy of the region. Both AFIT staff and students can be considered to hold high-value jobs. Furthermore, many AFIT students perform research in AFRL laboratories and are therefore considered to act as a 'glue' which holds AFRL units to the Wright site protecting those assets for the region. The Dayton region responded aggressively with a plan to

'privatize' AFIT. The State of Ohio stepped forward to budget \$4 million to provide a state subsidy for the operation of this 'new AFIT.'

Of course, in the end the AFIT budget was restored and it did not close. Meanwhile, the \$4 million remained in the Ohio budget. So DAGSI, through its members, proposed that the \$4 million be used for a collaborative research program which would bring Ohio faculty and students to Wright Patterson AFB to conduct research on topics proposed by the AFRL directorates. This was approved and allowed DAGSI to enter the research arena. A successor program continues today, though at a reduced budget and scope. Dr. Downie will provide some additional detail on these programs in her testimony.

FUTURE OPPORTUNITIES

It has been demonstrated that DAGSI is an effective organization in bringing Ohio university resources together to leverage federal resources at Wright Patterson AFB. DAGSI has provided student support, research funding, educational enrichment such as course sharing, and numerous collaborative programs. An opportunity over the next several years is the expansion of aerospace medicine at Wright Patterson AFB as mandated by the recent BRAC Commission along with the establishment of the Institute of Aerospace Medicine (IAM) to include the Air Force School of Aerospace Medicine. Wright State University offers the oldest civilian Master of Science in Aerospace Medicine in the US as well as the Master of Public Health and numerous biomedical science

graduate programs. Wright State University is well positioned to lead an expansion of DAGSI to meet the education and training needs of the expanding aerospace medicine workforce at Wright Patterson AFB.